

Title (en)

Additive for mineral oils and mineral oil distillates flowability improvement

Title (de)

Additiv zur Verbesserung der Fliessfähigkeit von Mineralölen und Mineralöldestillaten

Title (fr)

Additif pour améliorer l'écoulement d'huiles minérales et de distillats d'huile minérale

Publication

EP 0900836 B2 20080611 (DE)

Application

EP 98115479 A 19980818

Priority

DE 19739271 A 19970908

Abstract (en)

[origin: EP0900836A1] The additive comprises a mixture containing either and/or ester as solvent agent. An additive to improve the flowability of paraffin-containing mineral oil distillate comprises a mixture containing an ethylene/vinylester co- or terpolymer and at least one paraffin disperser. The ether is of formula R-O-R', where R = 4-30C linear or branched alkyl or alkenyl groups and R' = 1-30C linear or branched alkyl or alkenyl groups. The ester is one or more CO(s) with 4-30C oxygen residue) and one or more alcohol with 1-30C (alcohol residue). The ether and/or ester is/are cyclic, having a ring size of 6-30C. An Independent claim is also included for improving the flowability of mineral oils and mineral oil distillate.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (opposition)

Opponent :

- EP 0605857 A1 19940713 - BASF AG [DE]
- EP 0007590 A1 19800206 - BASF AG [DE]
- WO 9417160 A1 19940804 - EXXON CHEMICAL PATENTS INC [US], et al
- WO 9503377 A1 19950202 - EXXON CHEMICAL PATENTS INC [US], et al

Cited by

US2017145290A1; EP1116781A1; EP1134274A3; EP1134273A3; EP1116780A1; CN106715638A; AU2015289868B2; RU2711436C2; CN106795425A; AU2015289871B2; RU2711435C2; US6475250B2; US6592638B2; US10711175B2; US6461393B1; WO2016011015A1; WO2016011018A1; US6652610B2; US7435271B2; US10259986B2; US11084968B2

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